

G0416

Please type a plus sign (+) inside this box ☒

PTO/SB/05 (03-01)

Approved for use through 10/31/2002 OMB 0651-0032

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	P1410
First Inventor	SERGEY LOPATIN
Title	METHOD OF REDUCING ELECTROMIGRATION BYFORMING DEVICE THEREBY FORMED
Express Mail Label No.	EL912216026US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents

- ☒ Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
- ☐ Applicant claims small entity status
See 37 CFR 1.27.
- ☒ Specification [Total Pages 22]
(preferred arrangement set forth below)
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
- ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 5]
- Oath or Declaration [Total Pages 2]
 - ☒ Newly executed (original or copy)
Copy from a prior application (37 CFR 1.63 (d))
(for continuation/divisional with Box 18 completed)
 - ☐ DELETION OF INVENTOR(S)
Signed statement attached deleting inventor(s)
named in the prior application, see 37 CFR
1.63(d)(2) and 1.33(b).
- ☒ Application Data Sheet. See 37 CFR 1.76

ADDRESS TO:

Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

- ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
- Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
 - ☐ Computer Readable Form (CRF)
 - Specification Sequence Listing on:
 - ☐ CD-ROM or CD-R (2 copies); or
 - ☐ paper
 - ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

- ☒ Assignment Papers (cover sheet & document(s))
- ☐ 37 CFR 3.73(b) Statement (when there is an assignee) ☒ Power of Attorney
- ☐ English Translation Document (if applicable)
- ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
- ☐ Preliminary Amendment
- ☒ Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
- ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
- ☒ Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
- ☒ Other: Check No.s 4719 & 4720

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP)

of prior application No. _____ / _____

Prior application information

Examiner _____

Group Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

☒ Customer Number or Bar Code Label 24,394 or ☐ Correspondence address below
(Insert Customer No. or Attach bar code label here)

Name	LaRiviere, Grubman & Payne, LLP				
Address	P.O. Box 3140				
City	Monterey	State	California	Zip Code	93942
Country	USA	Telephone	(831) 649-8800	Fax	(831) 649-8835

Name (Print/Type)	May Lin DeHaan	Registration No. (Attorney/Agent)	42,472
Signature	May Lin DeHaan	Date	02/26/02

Burden Hour Statement This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231

02/26/02

J1011 U.S. PTO

10/08/02

02/26/02

02-28-02

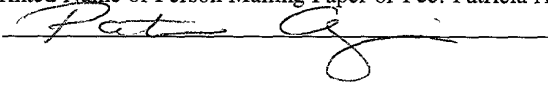
1011 U.S. PTO
10/084563
02/26/02

"Express Mail" mailing label number: EL912216026US

Date of Deposit: February 26, 2002

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Box Patent Application, Commissioner for Patents, Washington D.C. 20231.

Typed or Printed Name of Person Mailing Paper or Fee: Patricia Aguillon

Signature: 

PATENT
Docket No. P1410

IN THE**UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANTS: SERGEY LOPATIN
ALEXANDER H. NICKEL
PAUL L. KING

SERIAL NO.: TO BE ASSIGNED

FILED: FILED HEREWITH

TITLE: METHOD OF REDUCING ELECTROMIGRATION BY
FORMING AN ELECTROPLATED COPPER-ZINC
INTERCONNECT AND A SEMICONDUCTOR DEVICE
THEREBY FORMED

BOX PATENT APPLICATION
COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

TRANSMITTAL LETTER

Dear Sir:

In connection with the above-referenced matter, transmitted herewith are the following:


1. Utility Patent Application Transmittal (1 page);
2. Application Data Sheet C.F.R.1.76 (2 pages);
3. Specification (14 pages), Claims (7 pages), and Abstract (1 page);

- 4. Informal Drawings (5 sheets, 7 figures);
- 5. Declaration and Power of Attorney for Patent Application (2 pages);
- 6. Request and Certification under 35 U.S.C.122(b)(2)(B)(i) (1 page);
- 7. Recordation Form Cover Sheet (1 page);
- 8. Assignment Agreement (4 pages);
- 9. Fee Transmittal for FY 2002 (1 page);
- 10. Check No. 4719 in the amount of \$740.00 for basic application fee;
- 11. Check No. 4720 in the amount of \$40.00 for recordation fee; and
- 12. Post Cards in acknowledgment of all transmitted materials (2 postcards).

CLAIMS AS FILED BY A LARGE/SMALL ENTITY

(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) BASIC FEE \$740.00
TOTAL CLAIMS	20-20=	0	x \$18.00	0.00
INDEPENDENT CLAIMS	3-3=-0	0	x \$84.00	0.00
ANY MULTIPLE CLAIMS	0		0	
SURCHARGE				.00
TOTAL FILING FEE				\$740.00

Please date-stamp the enclosed postcard and return same to the undersigned in acknowledgment of receipt of all transmitted material.

Respectfully submitted,

May Lin DeHaan
Reg. No. 42,472

MLD/sgs
February 26, 2002
LARIVIERE, GRUBMAN & PAYNE
Post Office Box 3140
Monterey, CA 93942
(831) 649-8800

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PTO/SB/17 (10-01)
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FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$ 780.00

Complete if Known

Application Number	Filed Herewith
Filing Date	Filed Herewith
First Named Inventor	SERGEY LOPATIN
Examiner Name	Unknown
Group Art Unit	Unknown
Attorney Docket No.	P1410

METHOD OF PAYMENT

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:
- Deposit Account Number
- Deposit Account Name
- ☐ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17
- ☐ Applicant claims small entity status. See 37 CFR 1.27
2. ☒ Payment Enclosed: #4719 & 4720
- ☒ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
101	740	201	370			Utility filing fee	740.00
106	330	206	165			Design filing fee	
107	510	207	255			Plant filing fee	
108	740	208	370			Reissue filing fee	
114	160	214	80			Provisional filing fee	

SUBTOTAL (1) (\$ 740.00

2. EXTRA CLAIM FEES

Total Claims -20** = x =

Independent Claims -3** = x =

Multiple Dependent =

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
103	18	203	9			Claims in excess of 20
102	84	202	42			Independent claims in excess of 3
104	280	204	140			Multiple dependent claim, if not paid
109	84	209	42			** Reissue independent claims over original patent
110	18	210	9			** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 0.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
105	130	205	65			Surcharge - late filing fee or oath	
127	50	227	25			Surcharge - late provisional filing fee or cover sheet	
139	130	139	130			Non-English specification	
147	2,520	147	2,520			For filing a request for ex parte reexamination	
112	920*	112	920*			Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*			Requesting publication of SIR after Examiner action	
115	110	215	55			Extension for reply within first month	
116	400	216	200			Extension for reply within second month	
117	920	217	460			Extension for reply within third month	
118	1,440	218	720			Extension for reply within fourth month	
128	1,960	228	980			Extension for reply within fifth month	
119	320	219	160			Notice of Appeal	
120	320	220	160			Filing a brief in support of an appeal	
121	280	221	140			Request for oral hearing	
138	1,510	138	1,510			Petition to institute a public use proceeding	
140	110	240	55			Petition to revive - unavoidable	
141	1,280	241	640			Petition to revive - unintentional	
142	1,280	242	640			Utility issue fee (or reissue)	
143	460	243	230			Design issue fee	
144	620	244	310			Plant issue fee	
122	130	122	130			Petitions to the Commissioner	
123	50	123	50			Processing fee under 37 CFR 1.17(q)	
126	180	126	180			Submission of Information Disclosure Stmt	
581	40	581	40			Recording each patent assignment per property (times number of properties)	40.00
146	740	246	370			Filing a submission after final rejection (37 CFR § 1.129(a))	
149	740	249	370			For each additional invention to be examined (37 CFR § 1.129(b))	
179	740	279	370			Request for Continued Examination (RCE)	
169	900	169	900			Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 40.00

SUBMITTED BY

Name (Print/Type)	May Lin DeHaan	Registration No. (Attorney/Agent)	42,472	Complete (if applicable)	Telephone	831-649-8800
Signature	May Lin DeHaan			Date	02/26/02	

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

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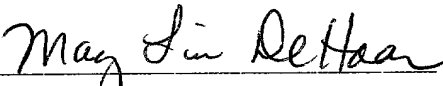
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REQUEST AND CERTIFICATION UNDER 35 U.S.C. 122(b)(2)(B)(i)	First Named Inventor	SERGEY LOPATIN
	Title	METHOD OF REDUCING ELECTROMIGRATION BY FORMING... DEVICE THEREBY FORMED
	Atty Docket Number	P1410

I hereby certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing. I hereby request that the attached application not be published under 35 U.S.C. 122(b).

02/26/02

Date


Signature

May Lin DeHaan, Reg No. 42,472

Typed or printed name

This request must be signed in compliance with 37 CFR 1.33(b) and submitted with the application **upon filing**.

Applicant may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant **must** notify the United States Patent and Trademark Office of such filing within forty-five (45) days after the date of the filing of such foreign or international application. **Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii)).**

Burden Hour Statement. This collection of information is required by 37 CFR 1.213(a). The information is used by the public to request that an application not be published under 35 U.S.C. 122(b) (and the PTO to process that request). Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is estimated to take 6 minutes to complete. This time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231 DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.